



# **Aquatic Life Use Impairment Study** **for the** **Occoquan Reservoir**

*Public Meeting*  
*Sully District Government Center*  
*Chantilly, Virginia*

*September 7, 2006*



# Meeting Agenda

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- **Introductions & Background**  
Katie Conaway, *VA DEQ*
- **Aquatic Life Use Impairment in the Occoquan Reservoir**  
Adil Godrej, *Occoquan Watershed Monitoring Laboratory*
- **Overview of the Nutrient Criteria for Lakes/Reservoirs**  
Bryant Thomas, *VA DEQ*
- **Direction for the Aquatic Life Use Impairment Study**  
Bryant Thomas, *VA DEQ*

# Getting Started

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- **Monitor and assess water quality for 305(b) Report.**
- **Place any waters not meeting Water Quality Standards on 303(d) List.**
- **Develop TMDL for each listed water.**



# Water Quality Standards

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- **Waters are listed as impaired based on Water Quality Standards (WQS).**
- **WQS:**
  - **Regulations based on federal and state law.**
  - **Set numeric and narrative limits on pollutants.**
  - **Consist of designated use(s) and water quality criteria to protect the designated uses.**

# Designated Uses

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- **Recreational**
- **Aquatic Life**
- **Public Water Supply**
- **Wildlife**
- **Fish Consumption**
- **Shellfish** (not applicable)



# Aquatic Life Designated Use

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- Intended to protect the “propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them.”
- To determine if the aquatic life use is being met, waters are assessed using various water quality data measures and biological indicators.
- Monitoring for appropriate levels of dissolved oxygen (DO) in water is one way of assessing the aquatic life use.
- The Virginia criterion for minimum DO in Class III nontidal waters is 4.0 mg/L



# Occoquan Reservoir 303(d) Listing

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- **It was first identified in Attachment B (e.g. Plaintiff's List) of the June 1999 Consent Decree (with no specific pollutant listed). The listing was based on the trophic assessment of the reservoir.**
- **The reservoir was first included on the 303(d) list in 2002. The aquatic life use impairment is due to low dissolved oxygen.**
- **Because of the 2002 listing, reservoir is subject to the consent decree schedule.**
- **It remains on the 303(d) list due to low DO with observed effects noted for total phosphorus based on exceedances of the assessment screening level (50 ug/L).**
- **TMDL/regulatory action is required by 2010 to meet the Consent Decree**

# Project Contacts:

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**Adil Godrej**

**Occoquan Watershed Monitoring Lab**

**Phone: (703) 361-5606 x114**

**Email: [agodrej@vt.edu](mailto:agodrej@vt.edu)**

**Katie Conaway**

**DEQ, Regional TMDL Coordinator**

**Phone: (703) 583-3804**

**E-mail: [mkconaway@deq.virginia.gov](mailto:mkconaway@deq.virginia.gov)**

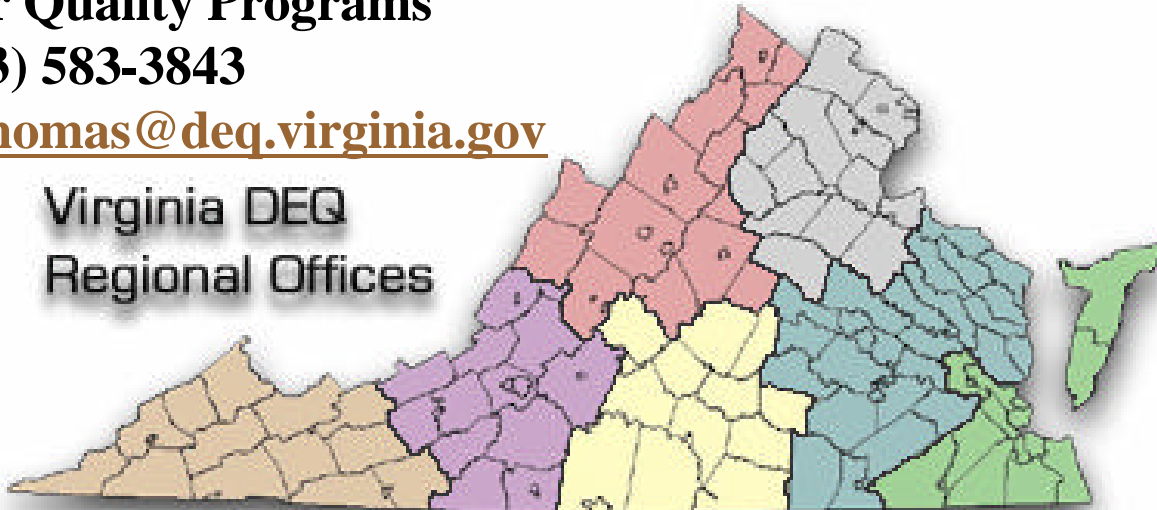
**Bryant Thomas**

**DEQ, Water Quality Programs**

**Phone: (703) 583-3843**

**Email: [bhthomas@deq.virginia.gov](mailto:bhthomas@deq.virginia.gov)**

Virginia DEQ  
Regional Offices







# Questions ?

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